From: Benjamin Shorr
To: Carrie Smith

Cc: Robert Gensemer; Eric Blischke/R10/USEPA/US@EPA; Jay.Field@noaa.gov; Robert.Neely@noaa.gov;

Ron.Gouguet@noaa.gov; Brad Hermanson; Jim Koloszar; Margaret Spence

Subject: Re: Rd. 2 Data Review- initial spatial analyses

Date: 12/21/2006 11:28 AM

Carrie- I added a couple of files- including LRM & FPM figure... otherwise they are the same-

Thanks,

ben

Carrie Smith wrote:

Ben -

Other than the fpm/lrm figures, has anything changed from yesterday? That is, I downloaded the files that were there last night - do I need to re-download again?

Carrie

>>> Benjamin Shorr 12/21 9:09 AM >>> Bob-

The files currently on the NOAA ftp site (draft) are:

```
pah_sereis1_RiverMiles.pdf; pah_series2_FandT.pdf;
pah_series3_AOPC.pdf = 3 series maps showing PAH's summarized by
River Miles, AOPC's, and Fate and Transport Segments.
ph_base_121806.pdf = 1 map of the River Miles with an explanation
of areas.
fpm_series1.pdf & lrm_series1.pdf = 2 map series with Logistic
Regression & Floating Percentile (separate- probably more
effective to map them together)
rm_surfsed_catlrisk_pah.xls = Excel Table & Graphs: Total PAHs
graphed by River Mile and side, Total
clam_totalpah_Identity2.xls = PAHs in clams (these in particular
are not perfect)
Multichem_statssummary_20061219.doc = Word Doc: Screenshots of
selected analytes in surface sediment Histograms & QQPlots
surfsed_catlrisk_pah_autodoc.txt = Metadata: Query Manager auto-
documentation (example)
```

I just added the LRM & FPM figures- all draft of course.

Also, I posted some examples for discussion on our ftp site:

```
I've posted some examples of mapping and Excel graphs (with data tables) for discussion. There may be errors- I've been using these as a test to explore the data and the processes.
```

Robert Gensemer wrote:

Thanks, all, for the replies. Ben, Carrie, Jim, and Margaret are all available tomorrow afternoon, so lets go for 2pm for a planning call to go over Ben's observations/questions, and get organized and going on analyses.

Lets us my callin number: Non-Responsive

Ben: In advance, could you send around a quick list of files we should have in front us on computer screens if we need to refer to them?

Thanks.

-Bob

Benjamin Shorr
<Benjamin.Shorr@noaa.gov>
12/20/06 11:02 AM >>>

Bob & Eric et al-

I've been going through the contaminant and spatial data and coming up with a methodology/process for querying and summarizing spatially to meet the needs of inputs to HH, ER, BSAF and the other analyses, and mapping/graphing. I've created some base GIS layers that we can uses to

summarize/assign location to contaminant data (River Miles & Fate and Transport segments) and have come up with a couple of observations/questions:

1. The reference value table should probably be in the same units as the database (Query Manager) with a clear indication of what guideline or value was chosen based on the priority preference. This will help with identifying the sources in tables/graphs/figures. Additionally, the Chem names should be translated into the Chemcodes in Query Manager-

this should help with ensuring consistency between $\operatorname{sed}/\operatorname{tissue}/\operatorname{bioassay}$ &

water data & using a look-up table.

2. Statistics: For summarized data- fate and transport segments, River Miles, nearshore receptor habitat etc. I have explored a bit how best to calculate 95% UCL's and perhaps UPLs (using surface

sediment as a test case) for 8 metals, Total PAH, PCBs, DDT, Dieldrin. Generally, these contaminants are distributed log-normally (entire site). We should discuss the best and most appropriate way to incorporate/present UCLs/UPLs. Generation of the following statistics for the sub-areas summation is a standard part of the methodology: Min, Max, Count, Mean, SD and Variance. I've also found that generating a master contaminant data query from Query Manager has some limitations in the GIS because of the -999 entry for non-tested analytes at a station. This just means that folks doing mapping & analysis need to coordinate on what queries should be used for

what pieces.

- 3. Non-detects or below detection limit: It's important to understand how Query Manager queries handle these selections- and how the inputs for the different analyses should be created. We should discuss this.
- 4. Inclusion/Exclusion of areas like GASCO, T4, McCormick & Baxters: how should data that is in these areas be handled for this data review?

Temporally, what data should be used for analysis and presentation for this Rd. 2 Data Review?

I've posted some examples of mapping and Excel graphs (with data tables)

for discussion. There may be errors- I've been using these as a test to

explore the data and the process.

nonresponsive

Maps: 3 series maps showing PAH's summarized by River Miles, AOPC's, and

Fate and Transport Segments. 1 map of the River Miles with an $\underline{\ }$

explanation of areas.

Excel Table & Graphs: Total PAHs graphed by River Mile and side, Total

PAHs in clams (these in particular are not perfect) Word Doc: Screenshots of selected analytes in surface sediment

Histograms & QQPlots

Metadata: Query Manager auto-documentation

I'm sure there is more, but these are initial observations after running $% \left(1\right) =\left(1\right) \left(1\right) \left$

through the data a bit, hopefully we can discuss and begin moving forward systematically.

Thanks,

Ben

Benjamin Shorr NOAA National Ocean Service Assessment and Restoration Division Physical Scientist, GIS Developer/Analyst 7600 Sand Point Way NE Seattle, WA 98115

(v) 206.526.4654 (f) 206.526.6865 benjamin.shorr@noaa.gov http://response.restoration.noaa.gov/orr_about.php

Benjamin Shorr NOAA National Ocean Service Assessment and Restoration Division Physical Scientist, GIS Developer/Analyst 7600 Sand Point Way NE Seattle, WA 98115

(v) 206.526.4654 (f) 206.526.6865 benjamin.shorr@noaa.gov http://response.restoration.noaa.gov/orr about.php